

CLAIMS:

1. A vaccine composition effective to promote production of antibodies binding to endogenous cholesteryl ester transfer protein (CETP) in a mammal, consisting essentially of a non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.
2. A vaccine composition as defined in Claim 1, wherein said mammal is a human and said non-endogenous CETP is selected from the group consisting of rabbit CETP, mouse CETP, simian CETP, humanized rabbit, mouse or simian CETP, and allelic variants or polymorphs of said human's CETP.
3. A vaccine composition effective to promote production of antibodies binding to endogenous cholesteryl ester transfer protein (CETP) in a mammal, consisting essentially of a mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.
4. A vaccine composition as defined in Claim 3, wherein said mammalianized CETP is a humanized rabbit CETP.
5. A vaccine composition as defined in Claim 4, wherein said humanized rabbit CETP has the amino acid sequence of SEQ ID NO. 5.
6. A vaccine composition as defined in Claim 1, wherein said mammal is a rabbit and said non-endogenous CETP is human CETP.
7. A vaccine composition as defined in Claim 1 or 3, which contains an adjuvant selected from the group consisting of alum, Freund's Complete Adjuvant, Freund's Incomplete Adjuvant, RIBI Adjuvant System.
8. A plasmid-based vaccine comprising a promoter sequence suitable for directing the transcription of a nucleotide sequence in a cell of a mammal operably linked to a nucleotide

sequence coding for a cholesteryl ester transfer protein (CETP) that is non-endogenous to said mammal.

9. A plasmid-based vaccine as defined in Claim 8, wherein said mammal is a human and said non-endogenous CETP is selected from the group consisting of rabbit CETP, mouse CETP, simian CETP, humanized rabbit, mouse or simian CETP, and allelic variants or polymorphs of said human's CETP.

10. A plasmid-based vaccine as defined in Claim 8, wherein said mammal is a human and said non-endogenous CETP is rabbit CETP.

11. A plasmid-based vaccine as defined in Claim 8, wherein said mammal is a human and said non-endogenous CETP is a humanized rabbit CETP.

12. A plasmid-based vaccine as defined in Claim 11, wherein said non-endogenous CETP has the amino acid sequence of SEQ ID NO: 5.

13. A plasmid-based vaccine as defined in Claim 8, wherein said mammal is a rabbit and said non-endogenous CETP is a human CETP.

14. A plasmid-based vaccine as defined in Claim 8, wherein the promoter is the cytomegalovirus immediate early promoter/enhancer.

15. A method for promoting production in a mammal of antibodies binding the mammal's endogenous CETP comprising administering to the mammal a non-endogenous CETP or a mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.

16. A method for elevating the ratio of circulating high density lipoprotein-associated cholesterol to circulating low density lipoprotein-associated cholesterol or total cholesterol in a mammal comprising administering to the mammal a non-endogenous CETP or a

mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.

17. A method for decreasing the level of endogenous CETP activity in a human or other animal comprising administering to the mammal a non-endogenous CETP or a mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.

18. A method for altering the metabolism of low density lipoprotein-associated cholesterol to decrease the development of atherosclerotic lesions in a mammal comprising administering to the mammal a non-endogenous CETP or a mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.

19. A method of lowering the level of circulating low density lipoprotein in a mammal comprising administering to the mammal a non-endogenous CETP or a mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.

20. A method of lowering the level of total circulating cholesterol in a mammal comprising administering to the mammal a non-endogenous CETP or a mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.

21. A method for therapeutically or prophylactically treating atherosclerosis in a mammal comprising administering to the mammal a non-endogenous CETP or a mammalianized non-endogenous CETP, optionally in combination with an adjuvant effective to non-specifically stimulate the immune response of said mammal.

22. A method according to any of Claims 15-21, wherein the mammal is a human and the non-endogenous CETP is a rabbit CETP.

23. A method according to any of Claims 15-21, wherein said mammalianized CETP is a humanized rabbit CETP.
24. A method according to Claim 23, wherein said humanized rabbit CETP has the amino acid sequence of SEQ ID NO. 5.
25. A method according to any of Claims 15-21, wherein said CETP is administered in combination with an adjuvant selected from the group consisting of alum, Freund's Complete Adjuvant, Freund's Incomplete Adjuvant, RIBI Adjuvant System.
26. A method for promoting production in a mammal of antibodies reactive with the mammal's endogenous CETP comprising transfecting at least one cell of the mammal with a plasmid-based vaccine according to Claim 8.
27. A method for elevating the ratio of circulating high density lipoprotein-associated cholesterol to circulating low density lipoprotein-associated cholesterol or total cholesterol in a mammal comprising transfecting at least one cell of the mammal with a plasmid-based vaccine according to Claim 8.
28. A method for decreasing the level of endogenous CETP activity in a human or other animal comprising transfecting at least one cell of the mammal with a plasmid-based vaccine according to Claim 8.
29. A method for altering the metabolism of low density lipoprotein-associated cholesterol to decrease the development of atherosclerotic lesions in a mammal comprising transfecting at least one cell of the mammal with a plasmid-based vaccine according to Claim 8.
30. A method of lowering the level of circulating low density lipoprotein in a mammal comprising transfecting at least one cell of the mammal with a plasmid-based vaccine according to Claim 8.

31. A method of lowering the level of total circulating cholesterol in a mammal comprising transfecting at least one cell of the mammal with a plasmid-based vaccine according to Claim 8.
32. A method for therapeutically or prophylactically treating atherosclerosis in a mammal comprising transfecting at least one cell of the mammal with a plasmid-based vaccine according to Claim 8.
33. A method according to any of Claims 26-32, wherein the mammal is a human and the plasmid-based vaccine includes nucleic acid encoding a rabbit CETP.
34. A method according to any of Claims 26-32, wherein the mammal is a human and the plasmid-based vaccine includes nucleic acid encoding a humanized rabbit CETP.
35. A method according to Claims 34, wherein said humanized rabbit CETP has the amino acid sequence of SEQ ID NO. 5.
36. A method according to any of Claims 26-32, which comprises the additional step of administering to said mammal an adjuvant effective to non-specifically stimulate the immune response of said mammal.
37. A method according to Claim 36, wherein the adjuvant is selected from the group consisting of alum, Freund's Complete Adjuvant, Freund's Incomplete Adjuvant, RIBI Adjuvant System.
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